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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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EXAMINER

TA 11

ART UNIT

PAPER NUMBER

3202

DATE MAILED:

01/23/97

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**OFFICE ACTION SUMMARY**

☒ Responsive to communication(s) filed on 8/8/96

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

☒ Claim(s) 1-12 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-12 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on 8/8/96 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

☒ Notice of Reference Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

**- SEE OFFICE ACTION ON THE FOLLOWING PAGES -**

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## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 91 (in Figures 1- 3); 102 (in Figures 2, 3 and 5A); and 103156 (in Fig. 4). Correction is required.

### ***Specification***

2. The disclosure is objected to because of the following informalities: page 4, line 10, a comma is required between "cavity" and "an"; page 5, line 8, change "of Fig. 7" to " of Fig. 6".

Appropriate correction is required.

### ***Claim Objections***

3. Claim 8 is objected to because of the following informalities: line 8, a comma or a word is missing between "cavity" and "an". Appropriate correction is required.

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaffer.

In regard to claim 1, Shaffer discloses a socket contact 10 for mating with a pin contact

~~40, the socket contact 10 comprising: an electrical component-attaching section 14 integrally~~  
formed with a receptacle section, the receptacle section forming a bore for receiving the pin contact 40, the receptacle section having a conductive element in the bore having a contact portion 16 for contacting the pin contact 40, an arc-arresting end portion 26 with an opening 18 therein which opens into the bore and has a diameter smaller than an outer diameter of the pin contact 40 (column 5, lines 20-32) for initially engaging the pin contact 40 and establishing an electrical connection between the pin contact 40 and the socket contact 10, and expansion means for permitting the opening 18 to expand as the pin 46 passes therethrough into the bore.

In regard to claim 2, Shaffer discloses that the expansion means comprises at least one slot 20 in the receptacle section.

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In regard to claim 3, Shaffer discloses that the expansion means comprises a plurality of slots 20 in the receptacle section.

In regard to claim 4, Shaffer discloses that the end portion 26 has a beveled surface extending radially outwardly and in a first direction for causing the opening 18 therein to expand when the pin contact 40 is inserted into the opening 18.

In regard to claim 7, Shaffer discloses that an electrical connector housing portion having a receptacle therein, the receptacle section of the socket contact 10 being disposed in the receptacle (column 4, lines 64-68 and column 5, lines 1 & 2).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Puerer.

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In regard to claims 5, 6, 8 and 11, Shaffer discloses an electrical socket contact 10 for mating with a pin contact 40 in an electrical connector, the socket contact 10 comprising: an electrical component-attaching end 14; an elastically expandable cylindrical section opposite of and integral with the electrical component-attaching end 14, the elastically expandable cylindrical section having a cavity 18 therethrough for receiving the pin contact 40 and an opening 26 with a diameter smaller than an outer diameter of the pin contact 40 (column 5, lines 20-32) whereby the pin contact 40 is inserted through the opening 26 into the cavity 18, an electrical connection is initially made between the pin contact 40 and the cylindrical section 26 in an area adjacent to the opening 26.

However, Shaffer does not disclose a strip of spring contacts 16 of conductive material located in the cavity of the elastically expandable cylindrical section for providing a more electrically efficient socket contact.

Puerner discloses a strip of spring contacts 64 of conductive material having a plurality of spaces apart cross members with a segment along their length having a reduced width and located in the cavity of the receptacle section for providing a more electrically efficient socket contact.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Shaffer by replacing the strip 64 and member 70 of Puerner for the member 30 in order to provide a more electrically efficient socket contact.

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In regard to claim 9, Shaffer discloses that the elastically expandable cylindrical section comprises at least one slot 20 extending along at least a portion of the length of the elastically expandable cylindrical section from the opening 26.

In regard to claim 10, Shaffer discloses that the elastically expandable cylindrical section comprises a plurality of slots 20 extending along at least a portion of the length of the elastically expandable cylindrical section from the opening 26.

In regard to claim 12, Shaffer discloses that an electrical connector housing portion having a receptacle therein, the elastically expandable cylindrical section being disposed in the receptacle (column 4, lines 64-68 and column 5, lines 1 & 2).

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*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (703) 308-0800. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Austin Bradley, can be reached at (703) 308-2319. Papers may be faxed directly to Group 3200 at (703) 305-3579.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-1148.



tdt  
January 14, 1997